



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/516,900	03/01/2000	Yukihiko Aoki	450100-02386	2789
20999	7590	09/07/2005	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			TRAN, THAI Q	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 09/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/516,900

Applicant(s)

AOKI, YUKIHIKO

Examiner

Thai Tran

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 10, 12-21, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,697,099 B2) in view of Saeijs et al (US 6,556,590 B1) and further in view of Takahashi et al (US 6,449,352 B1).

Regarding claim 1, as discussed in the last Office Action, Smith et al discloses a method for transmitting data in which the data is transmitted from an electronic equipment to other electronic equipment on a network in which a plurality of electronic equipment are connected over a serial bus interface (Fig. 1, col. 2, lines 18-57).

However, Smith et al does not specifically disclose the steps of detecting the timing of inserting discontinuity information data into contents of the data on said electronic equipment to be recorded and/or reproduced for a recording medium on said other electronic equipment on said network; and inserting said discontinuity information data into said data on detection of the timing of inserting the discontinuity information data in said detection step, wherein said discontinuity information data contains at least an indication of a status change of content and position within a source data; and a newly

Art Unit: 2616

added limitation "wherein said detection step detects the timing of inserting discontinuity information data in accordance with a change in an operation mode, a timing change, a content change, and a transition point in digital contents".

Saeijs et al teaches a method for transmitting data in which the data is transmitted on a network (Fig. 18 and col. 24, line 59 to col. 25, line 7, P1394 is serial bus interface), comprising:

a detection step of detecting the timing of inserting discontinuity information data into contents of the data to be recorded and/or reproduced for a recording medium (col. 23, lines 39-53); and

a step of inserting said discontinuity information data into said data on detection of the timing of inserting the discontinuity information data in said detection step, wherein said discontinuity information data contains at least an indication of a status change of content and position within a source data (col. 23, lines 39-53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the capabilities of detecting the missing packets and replacing the missing packets with the NULL packets as taught by Saeijs et al into Smith et al's system in order to record/reproduce other types of information signals in the known tape format (see col. 1, lines 65-67 of Saeijs et al).

The proposed combination of Smith et al and Saeijs et al does not specifically disclose the newly added limitation "wherein said detection step detects the timing of inserting discontinuity information data in accordance with a change in an operation mode, a timing change, a content change, and a transition point in digital contents".

Takahashi et al teaches the capability of adding a reference time signal continuous flag showing that the reference time signal is not continuous (corresponding to change identifier) so that the decoding process operation is stable when decoding (see col. 4, lines 35-44 and col. 5, lines 52-60).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the reference time signal continuous flag as taught by Takahashi et al into the combination of Smith et al and Saeijs et al in order to stabilize the decoding process operation.

Regarding claim 2, Saeijs et al discloses the claimed wherein said detection step detects a transition point on the time axis of the contents of the data recorded on said recording medium as said timing (missing packets disclosed in col. 23, lines 39-53).

Regarding claim 3, Saeijs et al further discloses the claimed wherein said detection step detects the outputting start time of the data recorded on said recording medium as said timing (starting playback disclosed in col. 23, lines 39-53).

Regarding claim 4, Saeijs et al discloses the claimed wherein said detection step detects the outputting end time of the data recorded on said recording medium as said timing (ending of the playback disclosed in col. 23, lines 39-53).

Regarding claim 5, Saeijs et al discloses the claimed wherein said detection step detects the time of seizing a channel on said network being used by another electronic equipment on said network and outputting data recorded on said recording medium as said timing (playback disclosed in col. 23, lines 39-53).

Regarding claim 6, Saeijs et al discloses the claimed wherein said detection step detects the time of transition of data recorded on said recording medium to variable speed playback as said timing (playback disclosed in col. 23, lines 39-53 and trick play disclosed from col. 19, line 66 to col. 20, line 16).

Regarding claim 7, Saeijs et al discloses the claimed wherein said detection step detects the time of contents switching of data recorded on said recording medium as said timing (missing packets disclosed in col. 23, lines 39-53).

Regarding claim 10, Saeijs et al discloses the claimed wherein said recording medium is a tape-shaped recording medium (digital video cassette (DVC), col. 1, lines 56-62 and col. 7, lines 38-46).

Regarding claim 12, Smith et al discloses a method for transmitting data in which the data is transmitted from an electronic equipment to other electronic equipment on a network in which a plurality of electronic equipment are connected over a serial bus interface (Fig. 1, col. 2, lines 18-57). However, Smith et al does not specifically discloses the steps of detecting the timing of inserting discontinuity information data into contents received from said electronic equipment through a communication medium different from said serial bus interface to be recorded and/or reproduced from a recording medium on said other electronic equipment on said network; and inserting said discontinuity information data into said data on detection of the timing of inserting the discontinuity information data in said detection step, wherein said discontinuity information data contains at least an indication of a status change of content and position within a source data, and the newly added limitation "wherein said detection

Art Unit: 2616

step detects the timing of inserting discontinuity information data in accordance with a change in an operation mode, a timing change, a content change, and a transition point in digital contents”.

Saeijs et al teaches a method for transmitting data in which the data is transmitted on a network (Fig. 18 and col. 24, line 59 to col. 25, line 7, P1394 is serial bus interface), comprising:

a detection step of detecting the timing of inserting discontinuity information data into contents received from outside through a communication medium different from said serial bus interface (col. 23, lines 39-53); and

a step of inserting said discontinuity information data into said data on detection of the timing of inserting the discontinuity information data in said detection step, wherein said discontinuity information data contains at least an indication of a status change of content and position within a source data (col. 23, lines 39-53).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the capabilities of detecting the missing packets and replacing the missing packets with the NULL packets as taught by Saeijs et al into Smith et al's system in order to record/reproduce other types of information signals in the known tape format (see col. 1, lines 65-67 of Saeijs et al).

The proposed combination of Smith et al and Saeijs et al does not specifically disclose the newly added limitation “wherein said detection step detects the timing of inserting discontinuity information data in accordance with a change in an operation mode, a timing change, a content change, and a transition point in digital contents”.

Takahashi et al teaches the capability of adding a reference time signal continuous flag showing that the reference time signal is not continuous (corresponding to change identifier) so that the decoding process operation is stable when decoding (see col. 4, lines 35-44 and col. 5, lines 52-60).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the reference time signal continuous flag as taught by Takahashi et al into the combination of Smith et al and Saeijs et al in order to stabilize the decoding process operation.

Regarding claim 13, Saeijs et al discloses the claimed wherein said detection step detects a transition point of contents of data received over said serial bus interface and into which has been inserted said discontinuity information data as said timing (missing packets disclosed in col. 23, lines 39-53).

Regarding claim 14, Saeijs et al discloses the claimed wherein said detection step detects the time of switching on station selection from a program received from outside over a communication medium different from said serial bus interface to a different program (selecting program A disclosed in col. 23, lines 13-22).

Apparatus claims 15-21 and 24 are rejected for the same reasons as discussed in corresponding method claims 1-7 and 10 above.

4. Claims 1, 8-9, 11, 15, 22-23, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al (US 6,697,099 B2) in view of Tsuria (US 5,786,845), Maeda (US 6,529,246 B1), and further in view of Takahashi et al (US 6,449,352 B1).

Regarding claim 1, as discussed in the last Office Action, Smith et al discloses a method for transmitting data in which the data is transmitted from an electronic equipment to other electronic equipment on a network in which a plurality of electronic equipment are connected over a serial bus interface (Fig. 1, col. 2, lines 18-57).

However, Smith et al does not specifically discloses the steps of detecting the timing of inserting discontinuity information data into contents of the data on said electronic equipment to be recorded and/or reproduced for a recording medium on said other electronic equipment on said network; and inserting said discontinuity information data into said data on detection of the timing of inserting the discontinuity information data in said detection step, wherein said discontinuity information data contains at least an indication of a status change of content and position within a source data, and a newly added limitation "wherein said detection step detects the timing of inserting discontinuity information data in accordance with a change in an operation mode, a timing change, a content change, and a transition point in digital contents".

Tsuria teaches a method for transmitting data in which the data is transmitted/received on a network (Fig. 1), comprising:

a detection step for detecting the timing of inserting discontinuity information data into contents of the data (detecting the zapping periods disclosed in col. 3, lines 54-65 and col. 1, lines 16-24); and

a step of inserting said discontinuity information data into said data on detection of the timing of inserting the discontinuity information data in said detection step, wherein said discontinuity information data contains at least an indication of a status

Art Unit: 2616

change of content and position within a source data (displaying advertisement data during zapping periods disclosed in col. 3, lines 54-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the capability of displaying advertisement data during zapping periods as taught by Tsuria into Smith et al's system in order to provide additional services which are especially applicable for use at zapping times (col. 1, lines 32-33 of Tsuria).

The combination of Smith et al and Tsuria as discussed above does not specifically disclose the claimed that the generating means inserting the generated discontinuity information data into contents of data on said electronic equipment to be recorded and/or reproduced for a recording medium on said other electronic equipment on said network and a newly added limitation "wherein said detection step detects the timing of inserting discontinuity information data in accordance with a change in an operation mode, a timing change, a content change, and a transition point in digital contents".

Maeda teaches that the inserting a channel number during zapping periods can be applied not only to a video cassette recorder but also to a television set or the like (col. 6, lines 43-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the implement the apparatus of Tsuria into video cassette recorder as taught by Maeda because Maeda teaches that displaying channel number

Art Unit: 2616

during zapping periods can be applied not only to a video cassette recorder but also to a television set or the like.

The combination of Smith et al, Tsuria, and Maeda discloses all the claimed limitations except for providing the newly added limitation "wherein said detection step detects the timing of inserting discontinuity information data in accordance with a change in an operation mode, a timing change, a content change, and a transition point in digital contents".

Takahashi et al teaches the capability of adding a reference time signal continuous flag showing that the reference time signal is not continuous (corresponding to change identifier) so that the decoding process operation is stable when decoding (see col. 4, lines 35-44 and col. 5, lines 52-60).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the reference time signal continuous flag as taught by Takahashi et al into the combination of Smith et al, Tsuria, and Maeda in order to stabilize the decoding process operation.

Regarding claim 8, Maeda discloses the claimed wherein said detection step detects the time of start of recording of data on said recording medium as said timing (col. 4, lines 18-38).

Regarding claim 9, Maeda discloses the claimed wherein said detection step detects the time of end of recording of data on said recording medium as said timing (col. 4, lines 18-38).

Regarding claim 11, the combination of Tsuria, Smith et al, and Maeda as discussed in claim 1 above discloses all the claimed invention except for providing a disc-shaped recording medium.

Smith et al further teaches a disc-shaped recording medium (DVD disclosed in col. 2, lines 18-26).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the replace DVD as taught by Smith et al for video cassette recorder of Maeda in order to increase the quality of the video signal to be recorded/reproduced and decrease the time in searching for the desired recorded video signal because DVD has higher quality than VCR and random access capability.

Apparatus claims 15, 22-23, and 25 are rejected for the same reasons as discussed in corresponding method claims 1, 8-9, and 11 above.

Regarding claim 26, Smith et al discloses an electronic equipment in which the data is transmitted from an electronic equipment to other electronic equipment on a network constructed by connecting a plurality of electronic equipment over a serial bus interface (Fig. 1, col. 2, lines 18-57). However, Smith et al does not specifically discloses tuning means for tuning data received from outside over a communication medium different from the serial bus interface; and generating means for generating discontinuity information data of data received through said serial bus interface and/or said tuning means; said generating means inserting the generated discontinuity information data into contents of data on said electronic equipment to be recorded and/or reproduced from a recording medium on said other electronic on said network,

Art Unit: 2616

wherein said data is received through said tuning means, and wherein said discontinuity information data contains at least an indication of a status change of content and position within a source data, and the newly added limitation "wherein said detection step detects the timing of inserting discontinuity information data in accordance with a change in an operation mode, a timing change, a content change, and a transition point in digital contents".

Tsuria teaches an electronic equipment in which data is transmitted/received on a network (Fig. 1), comprising:

tuning means (tuner unit 19 of Fig. 1, col. 2, lines 61-67) for tuning data received through said interface and/or said tuning means; and

generating means (advertisement data disclosed in col. 3, lines 54-65) for generating discontinuity information data of data received through said interface and/or said tuning means;

said generating means inserting the generated discontinuity information data into contents of data received through said tuning means, and wherein said discontinuity information data contains at least an indication of a status change of content and position within a source data (displaying advertisement data during zapping periods disclosed in col. 3, lines 54-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the capability of displaying advertisement data during zapping periods as taught by Tsuria into Smith et al's system in order to provide additional

Art Unit: 2616

services which are especially applicable for use at zapping times (col. 1, lines 32-33 of Tsuria).

The combination of Smith et al and Tsuria as discussed above does not specifically disclose the claimed that the generating means inserting the generated discontinuity information data into contents of data on said electronic equipment to be recorded and/or reproduced for a recording medium on said other electronic equipment on said network, and the newly added limitation "wherein said detection step detects the timing of inserting discontinuity information data in accordance with a change in an operation mode, a timing change, a content change, and a transition point in digital contents".

Maeda teaches that the inserting a channel number during zapping periods can be applied not only to a video cassette recorder but also to a television set or the like (col. 6, lines 43-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the implement the apparatus of Tsuria into video cassette recorder as taught by Maeda because Maeda teaches that displaying channel number during zapping periods can be applied not only to a video cassette recorder but also to a television set or the like.

The combination of Smith et al, Tsuria, and Maeda discloses all the claimed limitations except for providing the newly added limitation "wherein said detection step detects the timing of inserting discontinuity information data in accordance with a

Art Unit: 2616

change in an operation mode, a timing change, a content change, and a transition point in digital contents”.

Takahashi et al teaches the capability of adding a reference time signal continuous flag showing that the reference time signal is not continuous (corresponding to change identifier) so that the decoding process operation is stable when decoding (see col. 4, lines 35-44 and col. 5, lines 52-60).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the reference time signal continuous flag as taught by Takahashi et al into the combination of Smith et al, Tsuria, and Maeda in order to stabilize the decoding process operation.

Regarding claim 27, Tsuria discloses the claimed detection means (detecting the zapping periods disclosed in col. 3, lines 54-65 and col. 1, lines 16-24) for detecting the point of transition of contents of data having inserted therein said discontinuity information data received over said interface.

Regarding claim 28, Tsuria discloses the claimed wherein said generating means inserts said discontinuity information data when switching from a program being received from outside through said tuning means to a different program on station selection (zapping periods disclosed in col. 3, lines 54-65 and col. 1, lines 16-24).

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

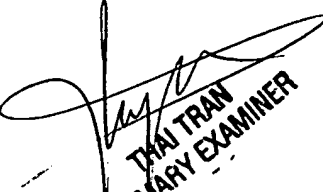
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai Tran whose telephone number is (571) 272-7382. The examiner can normally be reached on Mon. to Friday, 8:00 AM to 5:30 PM.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTQ


THAI TRAN
PRIMARY EXAMINER